

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A device for enabling network connectivity with a network service provider, the device comprising:

[[a]] an immobile wireless transceiver;

an antenna coupled to the immobile wireless transceiver; and

a switch coupled to the immobile wireless transceiver and to a wireline network, the switch exchanging data with the network service provider over the wireline network during normal operation and exchanging data with the network service provider via the wireless transceiver when connectivity is lost on the wireline network;

wherein the immobile wireless transceiver is configured to relay data from other immobile wireless transceivers that have lost connectivity to the wireline network, said other immobile wireless transceivers being connected to said immobile wireless transceiver directly or through one or more of said other immobile wireless transceivers when said data is being relayed, said other immobile wireless transceivers having been wireline-connected to the wireline network during normal operation.

2. (canceled)

3. (previously presented) The device of claim 1, wherein the wireless transceiver relays the data from the other wireless transceivers that have lost connectivity by forwarding data units received from the other wireless transceivers through the switch and to the wireline network.

4. (canceled)

5. (original) The device of claim 1, wherein the device is physically located at a location of a subscriber of the network service provider.

6. (original) The device of claim 1, wherein the wireless transceiver operates in accordance with IEEE 802.11 standards.

7. (original) The device of claim 1, wherein the wireline network includes a fiber network.

8. (original) The device of claim 1, wherein the wireline network includes coaxial cables.

9. (original) The device of claim 1, wherein the switch monitors a failed connection state of the wireline network for renewed connectivity of the wireline network and resumes communication over the wireline network when the wireline

connection is renewed.

10. (currently amended) A method performed by a network subscriber comprising:
establishing wireline-connectivity to a network service provider over a wireline
connection as normal connectivity of said network subscriber;

monitoring the wireline connection for failure; and

when the wireline connection fails, automatically establishing a substitute
wireline connection to the network service provider over ~~[[a]]~~ an immobile wireless
connection relayed from the network subscriber ~~for which the wireline-connectivity to~~
~~the network service provider over the wireline connection was established as normal~~
~~connectivity via~~ directly to one who has, or through more than one other network
subscriber who each has, separate wireline-connectivity to the network service provider
as normal connectivity ~~when the wireline connection fails;~~

~~—— wherein the wireless connection is established over multiple hops in an ad-hoc~~
~~network formed via a plurality of network units.~~

11-12. (canceled)

13. (original) The method of claim 10, wherein the wireless connection is formed
in accordance with IEEE 802.11 standards.

14. (original) The method of claim 10, wherein automatically establishing a
connection to the network service provider includes wirelessly broadcasting a

message requesting a relay to the network service provider by the one or more other network subscribers.

15. (original) The method of claim 14, wherein automatically establishing a connection to the network service provider further includes authorizing the subscriber to use the network.

16. (original) The method of claim 14, wherein the relaying one or more other network subscribers forward data received wirelessly from the network subscriber over a second wireless connection to the network service provider.

17. (original) The method of claim 10, further comprising:
monitoring a failed connection state of the wireline connection for renewed connectivity of the wireline connection; and
disconnecting from the wireless connection when the wireline connection is renewed.

18. (currently amended) A method for providing fallback network connectivity to a network service provider for one of a plurality of network nodes, said method comprising:

providing wireline-connectivity as primary network connectivity to said service provider for each one of said network nodes ~~over a wireline connection~~; and

providing backup network connectivity to said one node via a wireless network implemented over the remainder of the plurality of network nodes permanently located at residences of subscribers of the network service provider, said backup network connectivity provided by wirelessly relaying data directly from said one node ~~having primary wireline connectivity to the network service provider~~ to a first another node in the plurality of network nodes which has an active wireline connection to the network service provider or which is wirelessly connected to yet another node in the plurality of nodes ~~wireless network~~ that has an active wireline connection to the network service provider;

~~wherein the wireless network includes an ad hoc network and the backup network connectivity is established over multiple hops in the ad hoc network wireless network.~~

19-20 (canceled)

21. (canceled)

22. (original) The method of claim 18, wherein the wireless network is formed in accordance with IEEE 802.11 wireless connectivity standards.

23. (original) The method of claim 18, wherein providing the backup network connection includes authorizing a subscriber of the network with the network service provider.

24. (original) The method of claim 18, further comprising:

providing the backup network connectivity in response to a failed

connection state of the wireline connection.
25. (original) The method of claim 24, further comprising:

monitoring the failed connection state of the wireline connection for

renewed connectivity of the wireline connection; and

disconnecting from the backup network connectivity when the wireline

connection is renewed.
26. (original) The method of claim 18, wherein the network service provider

provides Internet connectivity or telephony services.
27. (original) The method of claim 18, wherein the wireline connection includes a

fiber connection or a coaxial connection leading to a subscriber of the network

service provider.
28. (currently amended) A network comprising:

wireline connections to a plurality of subscribers;

network interface units (NIUs) located at the plurality of subscribers, the

NIUs each including:

[[a]] an immobile wireless transceiver configured to communicate with

other NIUs;

and

a switch coupled to the immobile wireless transceiver and to one of the wireline connections, the switch providing data from the one of the wireline connections to a corresponding subscriber of the network during normal operation of the one of the wireline connections and the switch providing data from the immobile wireless transceiver to the corresponding subscriber of the network when connectivity on the one of the wireline connections fails;

wherein the immobile wireless transceiver is configured to relay data from other wireless transceivers in the other NIUs when connectivity on their respective wireline connections fails, the other wireless transceivers being connected to said immobile wireless transceiver directly or through one or more of the other wireless transceivers when the data is being relayed, and the other wireless transceivers having been wireline-connected to the wireline network during normal operation.

29. (original) The network of claim 28, wherein the NIUs form a wireless ad-hoc network.

30. (original) The network of claim 28, wherein the NIUs each additionally include:

an antenna coupled to the wireless transceiver.

31. (original) The network of claim 28, wherein the wireless transceiver is configured to relay data from other wireless transceivers that have lost

connectivity with the wireline connections.

32. (original) The network of claim 31, wherein the wireless transceiver relays the data from the other wireless transceivers that have lost connectivity by forwarding data units received from the other wireless transceivers through the switch and to the wireline network.

33. (canceled)

34. (new)

A method for maintaining wireline communication comprising:
providing first wireline communication and first wireless communication between a first network subscriber and a network service provider;
providing second wireline communication and second wireless communication between a second network subscriber and said network service provider; and
providing, when said first wireline communication fails, substitute wireline communication for said first network subscriber by way of said second wireline communication by wirelessly relaying data directly between two immobile nodes, one of said nodes located in or on premises of said first network subscriber and the other of said nodes located in or on premises of said second network subscriber, said other of said nodes relaying said data with said network service provider over a wireline otherwise normally carrying only said second wireline communication.